

AIR SYSTEMS

VITALITY Centrifugal Large Split

VCH-VIR 20 to 90 A



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A complete range from 16.8 kW up to 87.3 kW



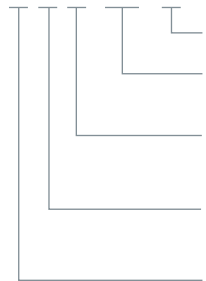
YKlon√3

Features

- YKlon √3 board
- High efficiency EER and COP
- Economizer or motorized damper
- Indoor air quality
- Hot water coil and control
- Scroll compressor with crankcase heater
- Possibility to be installed outdoor
- Return fan
- Digital thermostat DPC-1 included

VCH 40 A

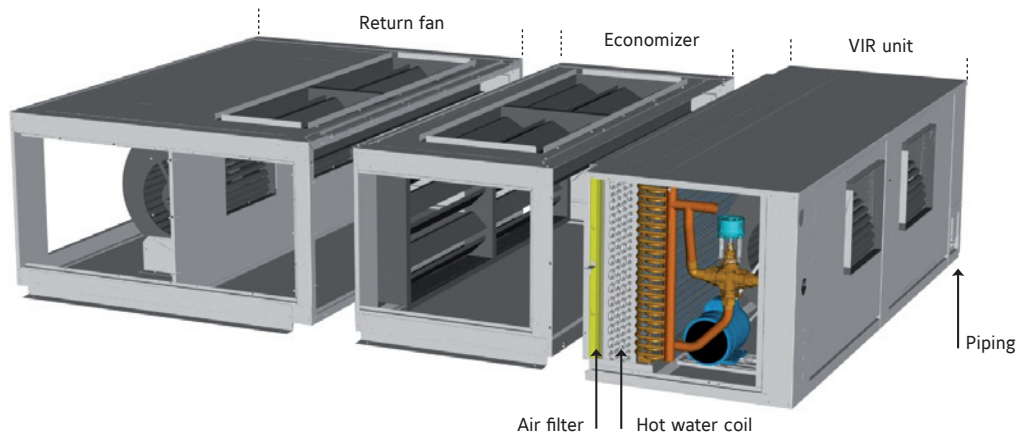
Nomenclature*



- A = version
- Capacity range:
40 = 40 kW
- Product category:
H = Heat Pump
R = Reversible
C = Centrifugal
I = Indoor
- V = Vitality

* Check codes in next page for discharge configuration

VIR - Indoor unit details



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VCH-VIR 20 to 90 A



Technical features

VITALITY UNITS									
Heat pump models	VCH/VIR	20	25	30	40	45	60	75	90
Cooling capacities	kW	16.8	20.6	28.7	32.4	43.5	54.1	76.1	87.3
Power input in cooling	kW	5.9	7.48	10.25	12.81	14.81	20.86	29.21	34.92
EER		2.85	2.75	2.8	2.53	2.94	2.6	2.61	2.5
Heating capacities	kW	21.5	23.2	32.3	39.3	47.4	53	77.7	89.9
Power input in heating	kW	5.68	6.84	9.95	12.87	13.75	20	27.56	33.19
COP		3.79	3.39	3.25	3.05	3.45	2.8	2.82	2.71
Refrigerant charge on site for 7m piping length	kg	8.5	8.5	12	12	2 x 9.5	2 x 10.5	2 x 15	2 x 16
Power supply		400V/3 + N/ 50Hz							
Nominal / Starting current	A	13 /	16 /	22 /	27 /	33 /	43 /	59 /	72 /
Main switch (1)	A	20	25	32	40	50	63	80	100
Main cable to the condensing unit (1)	Nbr x mm ²	5 x 4	5 x 4	5 x 6	5 x 10	5 x 10	5 x 16	5 x 25	5 x 35
Interconnecting cable (1)	Nbr x mm ²	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 2.5
Cable to standard thermostat (1) (2)	Nbr x mm ²	10 x 0.22							
Insulated refrigerant piping	Suction	1 1/8"	1 1/8"	1 1/8"	1 1/8"	2 x 1 1/8"	2 x 1 1/8"	2 x 1 3/8"	2 x 1 3/8"
	Liquid	1/2"	1/2"	5/8"	5/8"	2 x 1/2"	2 x 5/8"	2 x 7/8"	2 x 7/8"
Evaporator fan VIR at nominal airflow (3)	Airflow	4 590		7 500		9000	10500	13700	16000
	Standard ESP	117		118		130	137	125	175
	ESP with HSD	-		217		188	246	260	-
	ESP with HSMD	222		-		188	246	260	354
Condenser fan at nominal airflow	Airflow	6235	6235	11975	11975	17250	20340	25200	25200
	Standard ESP	50	50	50	50	50	50	50	50
Nett dimensions VCH condensing units	Height	1392	1392	1526	1526	1641	1641	1794	1794
	Length	1362	1362	1740	1740	2240	2240	2658	2658
	Depth	790	790	785	785	778	778	897	897
Nett dimensions VIR indoor units	Height	592		665		764	764	838	838
	Length	1360		1740		2240	2240	2653	2653
	Depth	785		785		772	772	892	892
Nett weight	VCH	285	310	355	375	578	589	710	715
	VIR	128		173		223	223	310	312

(1) For information only. These should be checked for compliance with local regulations depending also on installation and conductor type.

(2) Shield type cable will have a better insulation against electromagnetic interference. It is recommended for sensitive sites and for communications.

(3) ESP = External static pressure HSD = High speed drive HSMD = High speed drive and motor

All the data are at EUROVENT conditions with 400V/3+N/50Hz.

Cooling : Entering indoor coil temp. 27°C / 19°C WB and outdoor temperature 35°C

Heating : Entering indoor coil temp. 20°C and outdoor temperature 7°C / 6°C WB

Codes

INDOOR UNITS								
Cooling only & heat pump models	VIR 25		VIR 40		VIR 45	VIR 60	VIR 75	VIR 90
		S662562574		S662564074		S662564574	S662566074	S662567574
OUTDOOR UNITS								
Heat pump models	VCH 20	VCH 25	VCH 30	VCH 40	VCH 45	VCH 60	VCH 75	VCH 90
with horizontal discharge	S662512033	S662512643	S662513033	S662514054	S662514533	S662516143	S662517533	S662519033
with vertical discharge	-	-	-	-	S662514564	S662516173	S662517563	S662519063
Thermostat								
Delivered with the unit	DPC-1							



Manufacturer reserves the rights to change specifications without prior notice.



Accessories or options

Compatibility table / Codes

INDOOR UNITS								
Cooling only & heat pump models	VIR 25		VIR 40		VIR 45	VIR 60	VIR 75	VIR 90
	S662562574		S662564074		S662564574	S662566074	S662567574	S662569074
OUTDOOR UNITS								
Heat pump models	VCH 20	VCH 25	VCH 30	VCH 40	VCH 45	VCH 60	VCH 75	VCH 90
	with horizontal discharge	S662512033	S662512643	S662513033	S662514054	S662514533	S662516143	S662517533
with vertical discharge	-	-	-	-	S662514564	S662516173	S662517563	S662519063
Thermostat								
Delivered with the unit				DPC-1				
Accessories or options for condensing units								
VCH models	20	25	30	40	45	60	75	90
Low ambient regulation *	S613112583	0	0					
	S613114084			0	0			
	S613116084					0	0	
	S613111084						0	0
Vertical discharge kit	S612828305	0	0					
	S612828405			0	0			
	S612828505 **					0		
	S612828605 **						0	
Condensate tray heater	S612828205 **						0	0
	S611080789	A	A	A	A			
	S611080790					A	A	A
Copper-copper coil	Contact us	0	0	0	0	0	0	0
Blue fin	Contact us	0	0	0	0	0	0	0
Accessories or options for indoor units								
VIR models		25	40	45	60	75	90	
Electrical Heaters (inside the unit) (cable 20 m included)	10 kW (1 stage)	S611763704	O/A					
	15 kW (1 stage)	S611763714	O/A					
	10 kW (1 stage)	S611763724		O/A				
	20 kW (2 stages)	S611763734		O/A				
	15 kW (1 stage)	S611763744			O/A	O/A		
	30 kW (2 stages)	S611763754			O/A	O/A		
	30 kW (2 stages)	S611763764					O/A	O/A
	40 kW (2 stages)	S611763774					O/A	O/A
50 m connecting cable	1 stage	S611763780	A	A	A	A		
	2 stages	S611763781		A	A	A	A	A
Economizer or Motorised damper (dry bulb sensors included) (cable 20 m included)	S613994250	A						
	S613994400		A					
	S613994450			A	A			
	S613994750					A	A	
Indoor air quality	S606819964	A	A	A	A	A	A	
	S611082513	O						
Hot water coil and control (cable 20 m included)	S611084010		O					
	S611084512			O	O			
	S611087510					O	O	
50 m communication cable (Economizer/HWC)	S611087520 ***	A	A	A	A	A	A	
Return fan	S613995450			A	A			
	S613995750					A	A	
Vertical discharge Kit	S669482502	0						
	S669484002		0					
	S669486002			0	0			
	S669487502					0	0	
Indoor fan smooth start up to 5,5 kW	S606744690	0	0	0	0	0	0	
	S611991087	0						
High speed drive	S611991089		0					
	S611991091			0	0	0		
	S611991092					0		
	S611991095							0
High speed drive and motor	S611991088	0						
	S611991090			0	0			
	S611991093					0		
	S611991094						0	
	S611991096							0

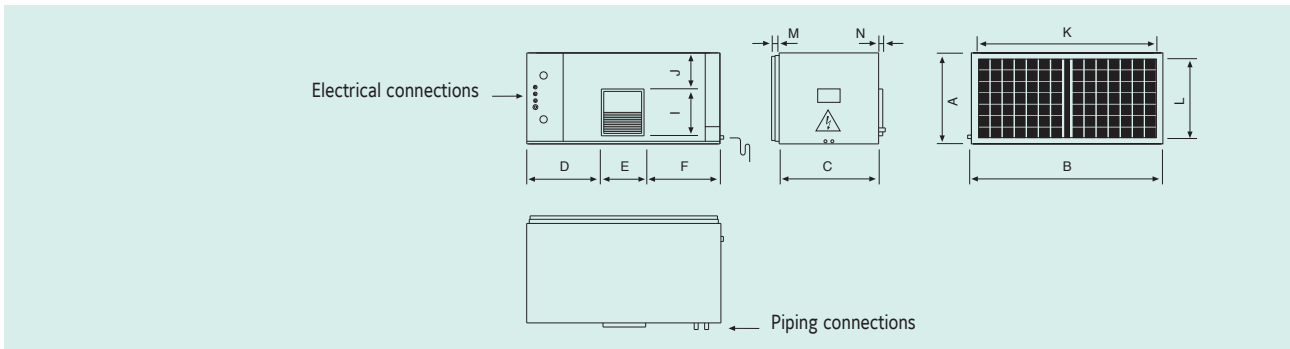
O = Option (factory fitted). A = Accessory (supplied loose). O/A = If you want this item factory fitted, precise it in the order form.

* Not protected against external condition. ** To be used only with horizontal discharge models

*** If the unit is equipped with economizer and hot water coil, only 1 communication cable is necessary.

Indoor units dimensions

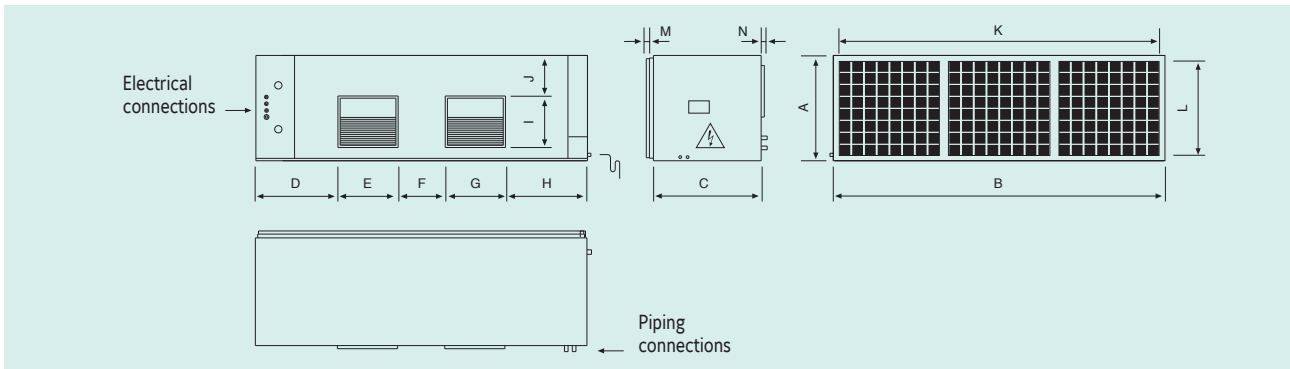
VIR 25A



All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VIR25A	592	1360	785	480	403	480	-	-	347	40	1094	520	21	25

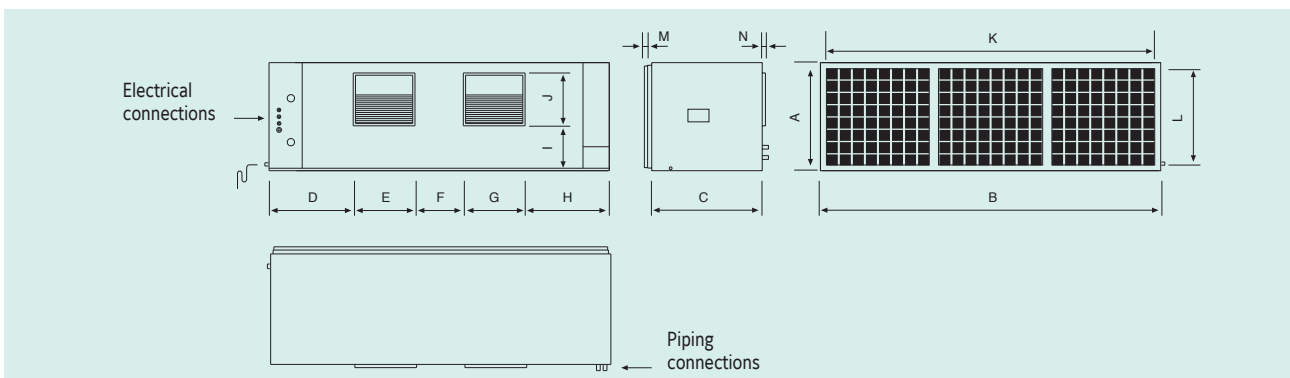
VIR 40-45-60A



All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VIR40A	665	1740	785	442	316	229	316	442	347	79	1337	593	21	25
VIR45A	764	2240	772	567	401	309	401	567	347	79	1920	692	21	25
VIR60A	764	2240	772	567	401	309	401	567	347	79	1920	692	21	25

VIR 75-90A

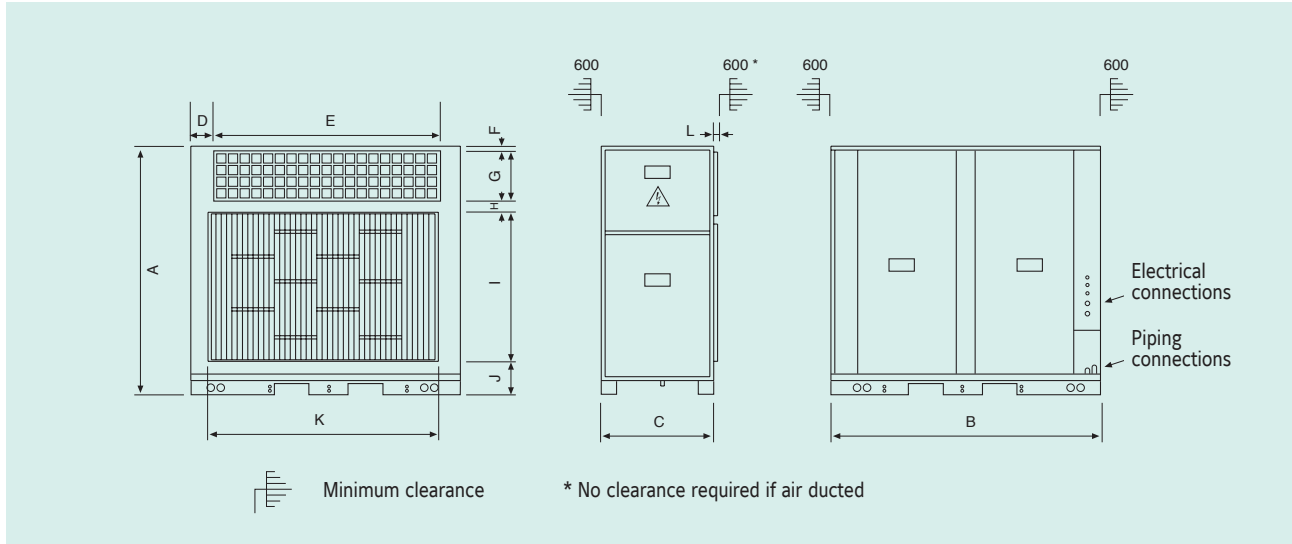


All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VIR75A	838	2653	892	663	478	376	478	663	409	79	2196	766	21	25
VIR90A	838	2653	892	663	478	376	478	663	409	79	2196	766	21	25

Dimensions and space requirements for condensing units

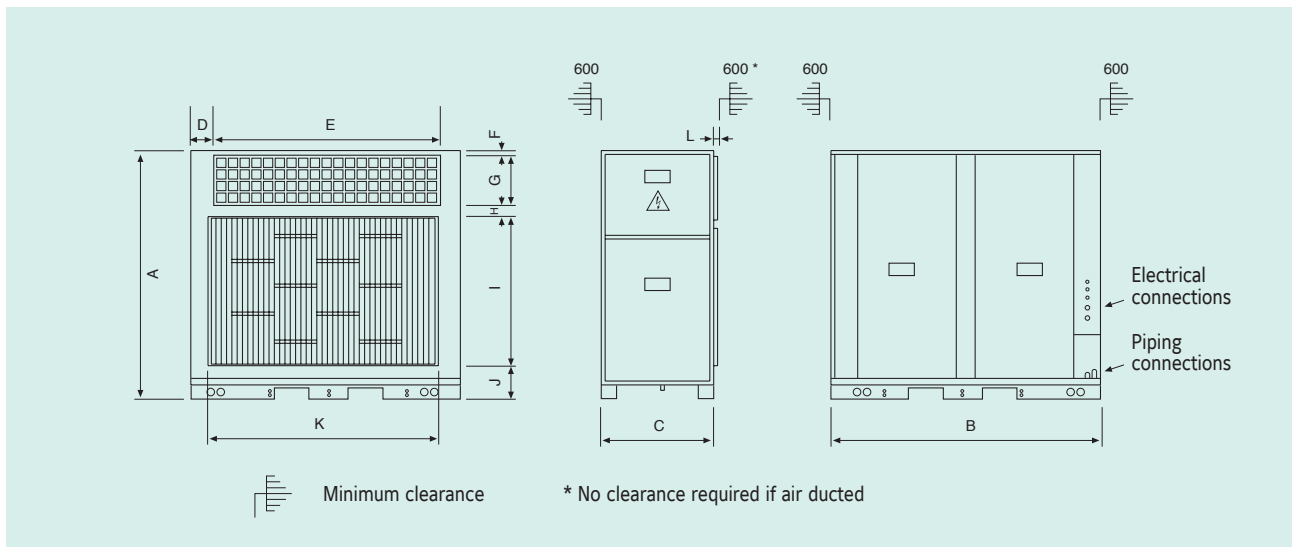
VCH 20-25A



All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L
VCH20A	1 392	1 362	790	147	1 069	30	268	37	919	138	1 100	24
VCH25A	1 392	1 362	790	147	1 069	30	268	37	919	138	1 100	24

VCH 30-40A

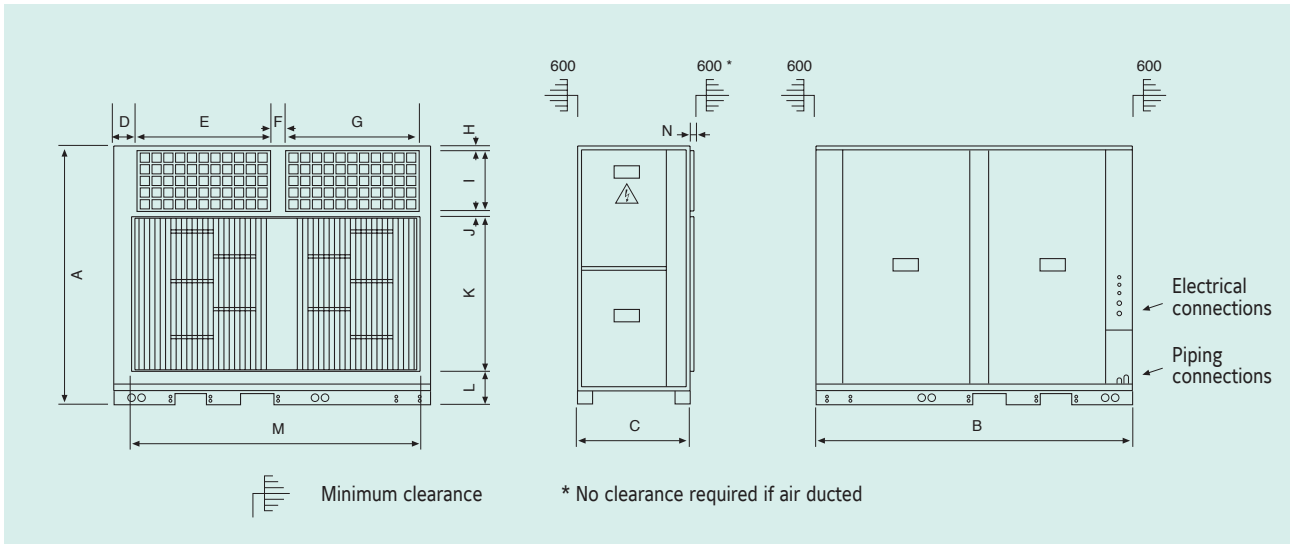


All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L
VCH30A	1 526	1 740	785	151	1 436	30	324	37	994	141	1 476	24
VCH40A	1 526	1 740	785	151	1 436	30	324	37	994	141	1 476	24



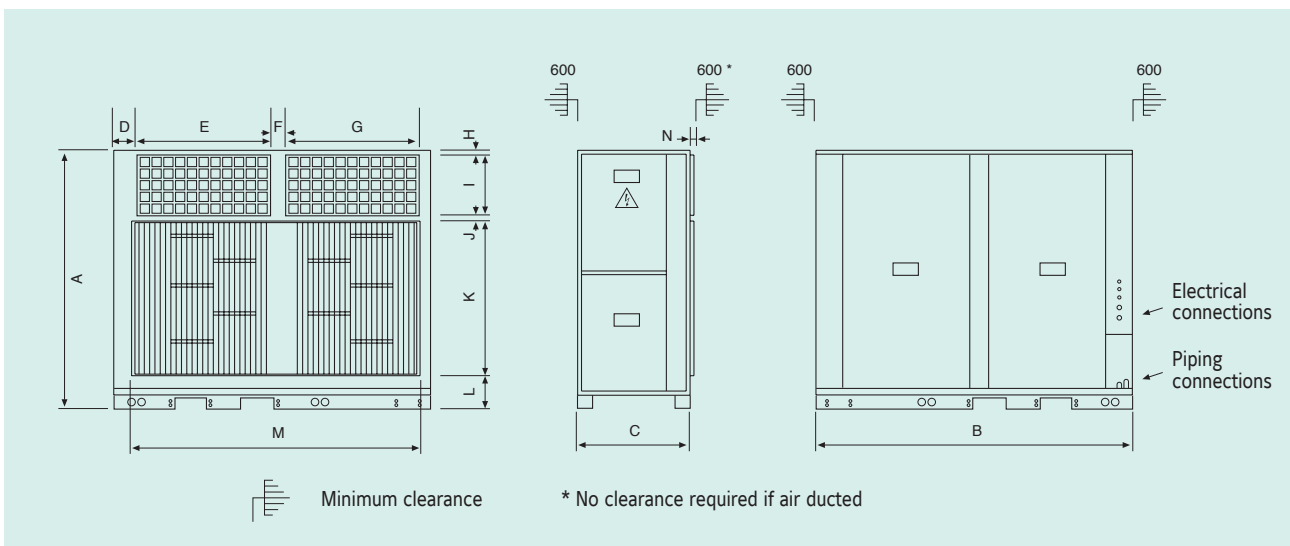
VCH 45-60A



All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VCH45A	1 641	2 240	778	148	945	95	945	38	389	38	1044	140	2 060	23
VCH60A	1 641	2 240	778	148	945	95	945	38	389	38	1044	140	2 060	23

VCH 75-90A



All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VCH75A	1 794	2 658	897	148	1155	95	1155	30	389	37	1 200	138	2 479	23
VCH90A	1 794	2 658	897	148	1155	95	1155	30	389	37	1 200	138	2 479	23

